A Needs Assessment Study for the Missouri Tele-hospice Project

Debra R. Oliver PhD[+], George Demiris PhD*, David A. Fleming MD*, Karen Edison MD*
[+] School of Social Work
[*]Health Management and Informatics-School of Medicine,
University of Missouri-Columbia

Hospice care focuses on palliation and the relief of suffering aiming to improve the quality of patients' last days. Telemedicine is considered to be a tool that can address challenges such as staff shortage, funding limitations and limited access to services in rural areas. Hospice services via telemedicine can be delivered directly into a patient's home by utilizing videoconferencing technology. The Missouri Telehospice Project aims to investigate the impact of a telehospice model on satisfaction with delivered care, caregiver burden, crisis prevention rates and overall cost of delivered care. Five urban and rural hospice agencies in Missouri are participating. A needs assessment study was conducted where hospice staff members responded to a set of questions within focus group and interview sessions providing feedback about the design, type of technology, frequency of usage and perceived impact on quality of hospice care.

The goal of hospice care is to improve the quality of patients' last days by offering comfort and dignity, focusing on palliation and the relief of suffering, individual control and autonomy. The number of hospices has grown rapidly in the last twenty years. However, still less than 25% of dying patients in the US access hospice services. Many elderly patients approach the end of life in isolation. Rural hospice providers have identified several barriers to the provision of hospice services in their communities such as shortage of nurses, aides, and social workers, and insufficient reimbursement.

Telemedicine, defined as the use of telecommunications and information technology with the goal to bridge geographical gaps and enhance the care delivery process, is considered to be a tool that can eliminate barriers to quality end-of-life care. Hospice services via telemedicine can be delivered directly into a patient's home by utilizing videoconferencing technology. This is of particular significance to underserved patients in rural and urban sites, and those with limited caregiver support. While attempts to integrate telemedicine in palliative care (telehospice) have taken place both abroad and in the United States, there is a lack of scientific evidence of the intervention's impact on hospice care.

The Missouri Tele-hospice Project aims to investigate with a control-experimental design the impact of a telehospice model on satisfaction with delivered care, caregiver burden, crisis prevention rates and overall cost of delivered care. Five hospice agencies in West Plains, St. Louis, Springfield, Moberly and Columbia, Missouri are participating in this project.. Their client population covers large and diverse geographic areas of the state.

The first phase of the project was a needs assessment study where ten hospice staff members from the 5 participating agencies (5 administrators and 5 care providers) participated in focus group sessions and interviews to address the following issues:

- The type and frequency of interaction that could be of added value to hospice care
- Issues related to the training of providers and development of educational materials
- Characteristics of patient subgroups that would be most appropriate for such an application
- Technical and clinical requirements
- Ethical considerations for the utilization of telemedicine technology (issues of patient's privacy, security of medical data, the potential burden of using new technology, and the impact on trust and the provider-patient relationship)
- Factors related to patients' acceptance and satisfaction
- Evaluation criteria (End of life care has unique characteristics that might run counter to customary evaluation metrics.)

The conclusion can be made that hospice staff have a positive perception of telehospice. This intervention is perceived as having the potential to reduce the sense of patient and caregiver isolation and burden, and improve the screening process during emergency situations. Such an intervention could also assist hospice agencies by decreasing travel time and costs as well as allowing staff to monitor patients more closely and provide timely and appropriate support at every stage of the dying process. Specific technical requirements resulted from this phase as well, that informed the design of the telemedical intervention.